Internal Audit Report 17-01
Ambulance Service Contract
April 2017
INTRODUCTION

The City of Sioux Falls, including the Sioux Falls Regional Emergency Medical Services Authority (REMSA), and Paramedics Plus, LLC entered into a Surface Ambulance Transport Services Franchise Agreement with an effective date of May 21, 2015. This agreement grants Paramedics Plus an exclusive franchise to provide all surface ambulance transport services that originate and end within the city limits of Sioux Falls. This audit focuses on contract compliance with response time requirements and mutual aid services.

BACKGROUND

During 2014, the City/REMSA issued a Request for Proposal (RFP) for a new ambulance service provider to operate within the City. As a result of this RFP, Paramedics Plus was chosen as the contractor to provide this service. The agreement between the City/REMSA and Paramedics Plus is a performance based contract in which Paramedics Plus must perform its services in full compliance with response time requirements and mutual aid requirements. The agreement provides that it is the City/REMSA’s responsibility to monitor the performance and compliance with the performance based specifications applicable to Paramedics Plus. REMSA was established in 1992 by the City to provide guidance on matters relating to emergency medical services (EMS) and to conduct quality assurance activities for the EMS system.

The ambulance contract outlines five priorities with which Paramedics Plus must comply by meeting specified response times. Calls are classified as Emergency or Non-Emergency and by Priority based on presumptive prioritization in accordance with the Emergency Medical Dispatching protocols as approved by REMSA. Emergency calls are classified as Priority 1, 2, or 3. Calls for non-emergency transportation that originate within the City are classified as Priority 4 if scheduled in advance and Priority 5 if unscheduled. The table below summarizes the response time compliance requirements.

<table>
<thead>
<tr>
<th>Priority Level</th>
<th>Description</th>
<th>Compliance</th>
<th>Maximum Time (in minutes and integer seconds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Life Threatening Emergency</td>
<td>90%</td>
<td>≤ 8:59</td>
</tr>
<tr>
<td>2</td>
<td>Non-Life Threatening Emergency</td>
<td>90%</td>
<td>≤ 11:59</td>
</tr>
<tr>
<td>3</td>
<td>Non-Emergency Response</td>
<td>90%</td>
<td>≤ 15:59</td>
</tr>
<tr>
<td>4</td>
<td>Scheduled Non-Emergency Transport</td>
<td>90%</td>
<td>+/- 30:00</td>
</tr>
<tr>
<td>5</td>
<td>Unscheduled Non-Emergency Transport</td>
<td>90%</td>
<td>≤ 90:00</td>
</tr>
</tbody>
</table>
All 911 calls are answered by Metro Communications (Metro), which is the City’s designated Public Safety Answering Point (PSAP) and communications facility for emergency and non-emergency requests for services. Once Metro obtains the patient’s location, callback number, and patient problem type, the call is dispatched to Paramedics Plus. This is the point at which the ambulance response time clock begins. The ambulance response time clock ends when the ambulance crew arrives on scene. Response time compliance is to be maintained on 90% of calls and calculated on a monthly basis using the *fractile response time measurement*.\(^1\) Failure to perform will result in financial penalties and may cause the replacement of Paramedics Plus. The chart below illustrates that Paramedics Plus has been compliant with response time requirements for January 2016 to December 2016.

\(^1\) This methodology places each response within the minute it is achieved and stacks the minutes in ascending order to establish a fractile response-time distribution. The point at which the fractile response time crosses the 90th percentile measures the point of the service’s response-time reliability.
The contract also describes the types of services that are exempt from the response time compliance requirements; for example, requests for services originating outside the City, a declared multi-casualty incident or disaster, or those determined to be of good cause for an exception. Good cause for an exception may include circumstances such as inaccurate dispatch information received from Metro, disrupted voice or data radio transmission, mobile data terminal failure, material change in dispatch location, inability to locate scene due to non-existent address, severe weather conditions, unavoidable delays caused by parked trains, or periods of unusual system overload. Other circumstances that occur within the ambulance’s reasonable control will not be grounds for an exception to be granted. All exceptions must be documented in writing, received by the Contract Administrator, and approved or denied by the Contract Administrator.

Paramedics Plus is required by contract to document all times necessary to determine if they are compliant with the response time requirements. On a monthly basis, they must report their results to the City/REMSA. Paramedics Plus uses the software tool PULSE (patent pending for Performance Utilization Late-call System Evaluation) along with the server and interface to Metro’s New World computer-aided dispatch (CAD) system to track and review calls. The City/REMSA are also provided with an interface to access CAD and PULSE in order for them to independently extract response time data and validate response time performance and contract compliance.

In the event it is determined that the nearest paramedic-staffed ambulance may be located in an adjacent jurisdiction or there is a call surge and internal capacity does not meet the demand for ambulances, mutual aid may be dispatched in the interest of getting the quickest ambulance to the patient. REMSA approves the use of closer ambulances contingent upon Paramedics Plus executing a satisfactory mutual aid agreement with the ambulance agencies responding from neighboring jurisdictions. The contract also provides that Paramedics Plus must respond in a mutual aid capacity to other service areas outside the City in accordance with mutual aid agreements or if so directed by the Contract Administrator. Paramedics Plus must document the number and nature of mutual aid responses it makes as well as the number and nature of mutual aid responses made by other agencies to calls originating within the City.

**OBJECTIVES**

The objectives of this audit were to:

1. Determine how the City Health Department ensures response time compliance requirements of the Paramedics Plus contract are met.
2. Determine if proper mutual aid procedures are in place.

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2 Unusual system overload is defined as 200 percent of the average demand for the day of the week and hour of day. The average demand for each day and hour is calculated on an annual basis using the prior calendar year’s actual run volume.
SCOPE AND METHODOLOGY

The scope of this audit included a review of the City Health Department’s response time compliance procedures and reports from January 1, 2016 to December 31, 2016 and a review of mutual aid procedures in place during this timeframe. Our audit work included the following:

- Review of ambulance contract between the City and Paramedics Plus.
- Interviews with the City Health Department management and department staff.
- Observation of the City Health Departments daily review process of prior day calls and the daily PULSE call.
- Detailed testing of calls exceeding the response time requirements for a sample of days to verify they are properly reviewed and exemptions are properly approved and documented.
- Verification of a sample of monthly response time compliance reports from the City Health Department and from Paramedics Plus to ensure they are completed and presented to REMSA monthly.
- Review of the REMSA Board monthly meeting minutes.

RESULTS

Response Time Compliance

We found that the City Health Department has various procedures in place to determine if Paramedics Plus is in compliance with response time requirements of the contract. All prior day calls exceeding the response time requirements are reviewed and documented by the City’s Emergency Medical Quality Assurance Coordinator (EMQAC) the following morning. These calls are reviewed to determine if they are truly late based on contract requirements or if an exemption exists. The results are documented in detail and the EMQAC performs a secondary review to ensure the initial conclusions are accurate. The final document is then emailed to various management personnel at Paramedics Plus, Metro, Sioux Falls Fire Department, Sioux Falls Health Department, and the Communications Center in Texas for their review during the daily PULSE call. During this conference call, all parties in attendance review the late calls or any questionable calls to verify they are all in agreement with the EMQAC’s conclusions. At month end, the EMQAC prepares a monthly compliance report which is reconciled to the monthly compliance report prepared by Paramedics Plus. These reports are then presented at the monthly REMSA Board meeting.

We reviewed all calls exceeding the response time requirements for a sample of 38 days during 2016 and noted they are properly documented, reviewed, and approved. We also verified that City Health Department and Paramedics Plus presented their response time compliance reports to REMSA during each month in 2016.
Mutual Aid

We determined that there are proper mutual aid procedures in place and that Paramedics Plus meets their contract requirements by having mutual aid agreements with other Minnehaha County services. Paramedics Plus has a signed mutual aid agreement with Dell Rapids Ambulance and Humboldt Fire and Ambulance Service. The agreement provides that in the event the need arises, Paramedics Plus may call upon either service to provide additional emergency services to areas serviced by Paramedics Plus.

CONCLUSION

In conclusion, our audit provides assurance that the City Health Department has various procedures in place to ensure Paramedics plus is compliant with the contract requirements for response times and mutual aid services. Further, we noted that there is a positive working relationship between the City Health Department staff and Paramedics Plus. Those interviewed appear to be exceptionally knowledgeable and dedicated to their profession. We would like to thank the management and staff of the City Health Department and Paramedics Plus for their cooperation and assistance during this audit.

AUTHORIZATION

The Sioux Falls City Council approved this audit by resolution in April 2017 as part of the 2017 Annual Audit Program. The Internal Audit Division operates under the authority of an Internal Audit Charter adopted by City Council resolution 11-13.

AUDIT STANDARDS

This audit was conducted in accordance with the *International Standards for the Professional Practice of Internal Auditing* issued by the Institute of Internal Auditors.

STATEMENT OF INDEPENDENCE

Internal Audit is administratively and operationally independent of the programs and departments it audits, both in appearance and in fact. The Internal Audit Manager is accountable to an Audit Committee appointed by the City Council per section 32.022 of the Code of Ordinances of Sioux Falls, SD.
DISTRIBUTION OF REPORT

This report is intended for the information and use of the Mayor and City Council, management, and others within the City of Sioux Falls. However, the report is a matter of public record and its distribution is not limited.

PERFORMED BY

Ashley VanDeBerg
Internal Auditor